

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

(12) UK Patent Application (19) GB (11) 2 023 086 A

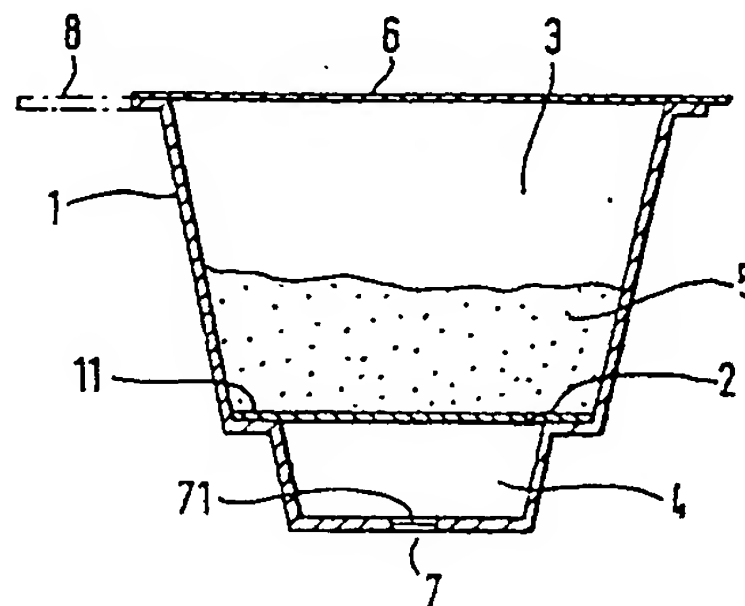
- (21) Application No 7919413  
 (22) Date of filing 4 Jun 1979  
 (23) Claims filed 4 Jun 1979  
 (30) Priority data  
 (31) 53/068026  
 (32) 5 Jun 1978  
 (33) Japan (JP)  
 (43) Application published  
 28 Dec 1979  
 (51) INT CL<sup>2</sup>  
 B65D 85/70  
 (52) Domestic classification  
 B8C 15A 15C 15D 15E1  
 21A1 30  
 (56) Documents cited  
 GB 1523485  
 GB 1427375  
 GB 1254263  
 GB 1203140  
 GB 938617  
 GB 413488  
 (58) Field of search  
 B8C  
 (71) Applicant  
 Ryuiti Kitahara,  
 No. 169 Suwanomori-  
 Nishi 2-cho,  
 Hamadera,  
 Sakai-shi,  
 Osaka-fu,  
 Japan.  
 (72) Inventor  
 Ryuiti Kitahara  
 (74) Agents  
 Mewburn Ellis & Co.

(54) Sealed container for beverage materials

(57) A sealed container has a partition in the form of a filter (2) which separates the container into an upper chamber (3) containing a material 5 from which a beverage can be made by the addition of liquid and a lower reservoir chamber (4). A stepped shoulder (11) around the periphery of the container provides a surface to which the filter is attached. The upper chamber (3) can

have a removable lid (6). A portion (7) in the base of the container has a thinner portion so that it can be readily pierced to provide an opening (71). Alternatively the base of the container can be formed with an outwardly directed projection which can be removed by cutting or tearing to provide an opening. The container may contain nitrogen. In use the lid (6) is removed, the portion (7) pierced and hot water poured onto the coffee which filters through the filter (2) into a cup placed beneath.

Fig. 1.



The drawings originally filed were informal and the print here reproduced is taken from a later filed formal copy.

GB 2 023 086 A

Fig. 1.

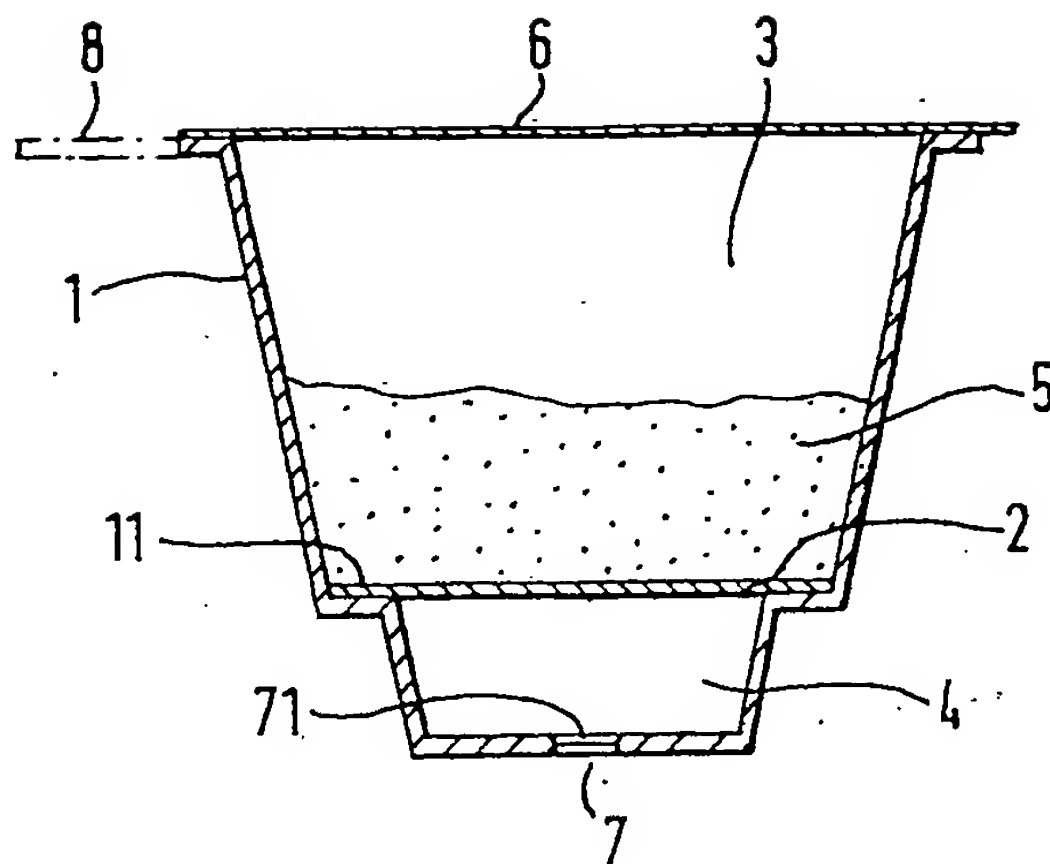


Fig. 2.

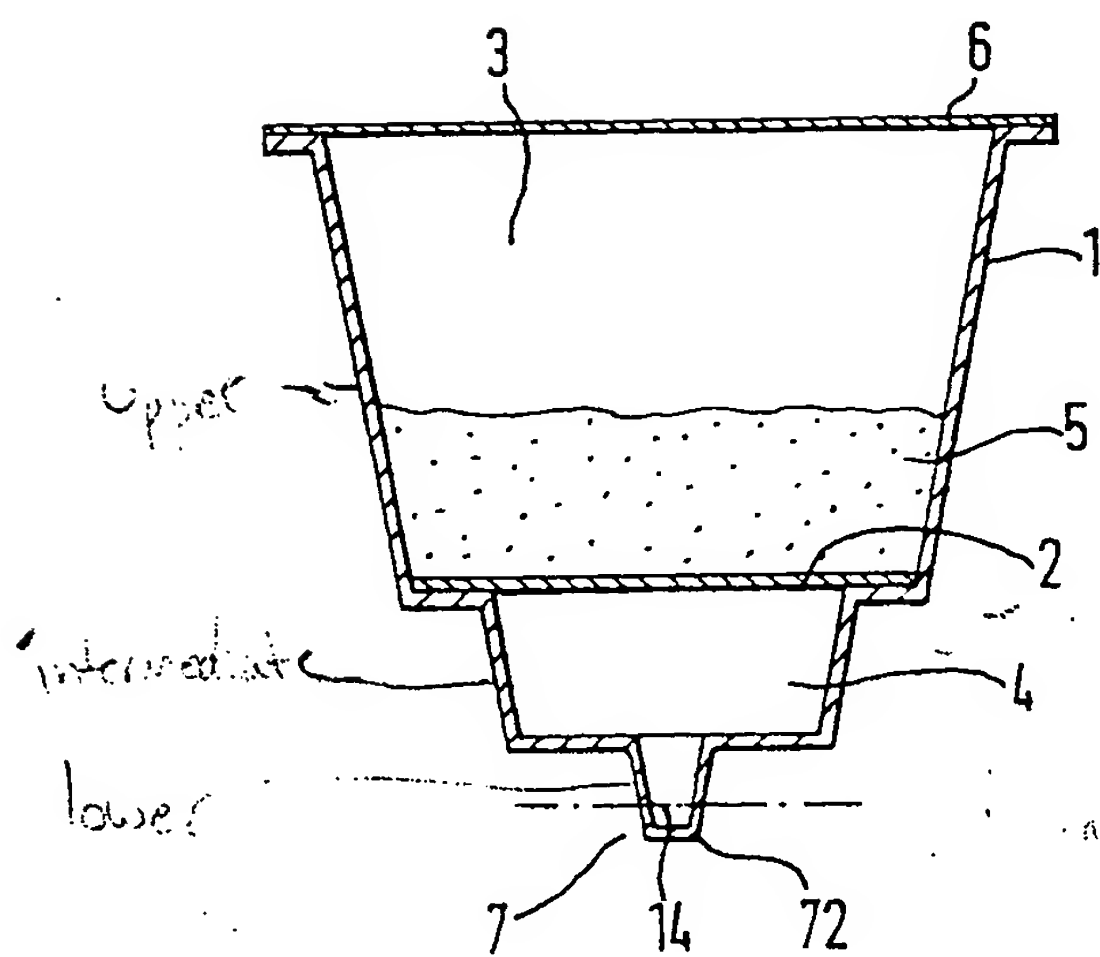
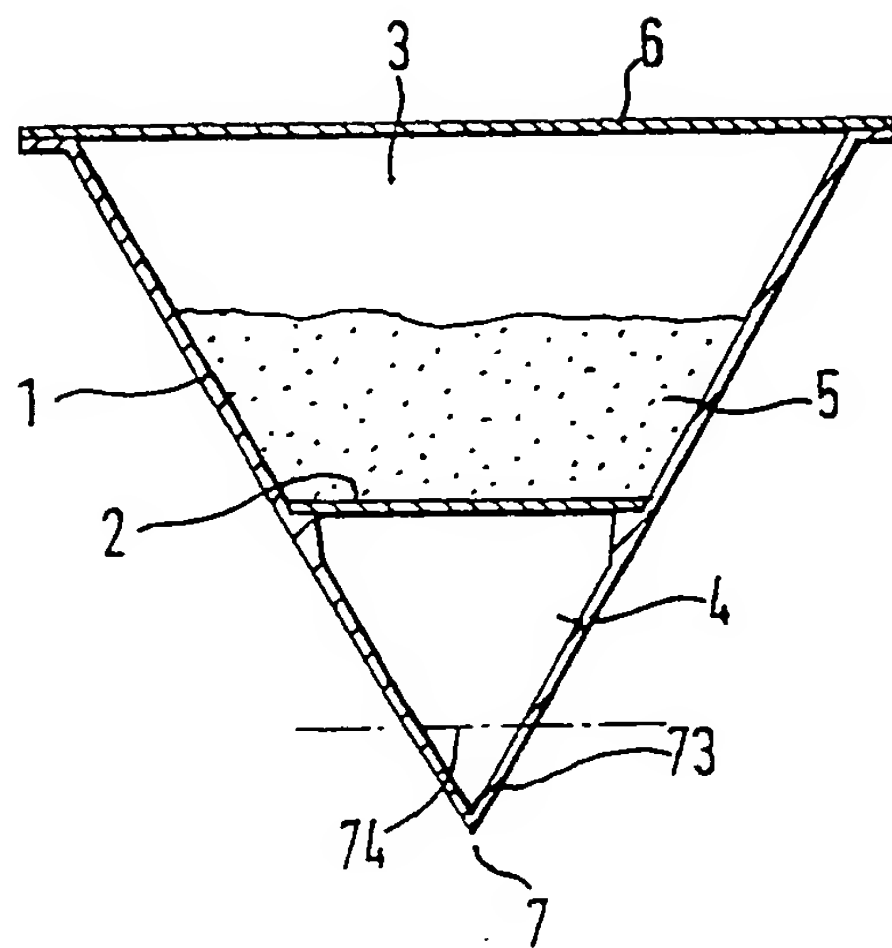


Fig. 3.



## SPECIFICATION

### Sealed container

5 The present invention relates to a sealed container with which coffee, tea or the like can be prepared.

In order to serve for example, good quality real straight or blended coffee it is essential to use freshly ground coffee beans. Recently it has become

10 popular to prepare real coffee at home by either grinding coffee beans using a coffee mill or by purchasing a pack of ready ground coffee.

When using a coffee mill coffee beans have to be ground on each occasion that coffee is prepared

15 which can be extremely inconvenient. In the case of purchasing packed ready ground coffee or coffee powder, the material shows loss in flavour and taste with time. Moreover, an effort must be made to prepare the utensils used in coffee making, whether the coffee is percolated or a filter is used, and to clear the utensils away and wash them after use.

According to the present invention there is provided a sealed container having a partition in the form of a filter which separates the container into an upper and a lower chamber, wherein the upper

25 chamber contains a material from which a beverage or the like can be prepared by the addition of aliquid and the lower chamber includes a portion adapted so that, in use, it can be breached to provide an

30 opening for the outflow of liquid from the container. Preferably the container comprises a removable sealing lid forming a top wall of the upper chamber. The outer wall of the container preferably includes a peripheral shoulder which provides an attaching

35 surface on the inside of the container for the partition. The said portion can, for example, be a region of reduced thickness in the base of the container or a removable outwardly directed projection from the base of the container. Alternatively the

40 base of the container can be conical or pyramidal in form and the said portion can be at the apex of the cone or pyramid and can be adapted to be removed eg. by cutting or tearing or the like.

Embodiments of a percolator or filter according to the present invention will now be described by way of example with reference to the accompanying drawings:

wherein;

45 *Figure 1* is a cross sectional view of a first embodiment;

*Figure 2* shows in cross section a second embodiment; and

*Figure 3* is a cross section of a third embodiment. Referring firstly to *Figure 1* an open-topped vessel

50 1 formed by moulding synthetic resin material such as polypropylene has a stepped shoulder portion 11 which extends around the perimeter of a lower part of the side wall of the vessel. A filter 2 is fitted at its outer edge into the shoulder portion 11 and is

60 attached thereto by fusion or the like so as to divide the container into an upper chamber above the filter and a lower reservoir chamber 4 below the filter 2. Powder or ground coffee 5 sufficient for one or more cups is placed in the upper chamber 3 and then the

65 open top of the vessel 1 is covered and tightly sealed

with a lid 6. The lower chamber 4 of the container is provided with a portion in an outer wall of the container which can be pierced or bored to provide an opening. The portion 7 has a reduced wall

70 thickness to facilitate the piercing or boring action.

The embodiment illustrated in *Figure 2* is similar to that shown in *Figure 1* except that the lower part of the container includes a projecting portion 72 in its base wall which can be torn or cut off at 74 to

75 provide an opening.

The embodiment illustrated in *Figure 3* is similar to that shown in *Figure 1* (like parts being indicated by like numerals), but is of a different shape. The vessel 1 is conical or pyramidal in shape. The base of the container is at the apex of the cone or pyramid and provides a pointed projection 73 which can be torn or cut off at 74 to provide an opening. An internal shoulder around the periphery of vessel 1 provides a surface to which the filter 2 is attached.

80 In any one container the construction, position and number of the portions 7 which can be breached to provide an opening or openings are not limited to the illustrated embodiments but may be appropriately modified according to the quantity of coffee material, the particle size of the powder, and various other conditions affecting coffee making.

On the upper periphery of the container a tongue 8 may be provided (as shown in *Figure 1*) for hanging the container on the rim of a coffee cup or for ease of

95 handling. In each embodiment the sealed container is assembled by charging a suitable amount of ground or powder coffee material 5 in the upper chamber 3 of the container, sealing the open top with a lid 6, and filling the chamber 3 and the lower chamber 4 with nitrogen gas or the like. If desired the containers may be supplied in bulk, each container being held in a packing case provided with a plurality of receiving sections.

100 In use a container is taken from the case, the portion 7 to be breached is pierced or cut off to form an opening 74 on the base of the container. The sealed lid 6 is removed, and then the vessel 1 is put on a receptacle such as a coffee cup.

110 Hot water is poured on to the material 5 and passes through the coffee and the filter 2 to provide filtered coffee fluid. The fluid is then temporarily retained in the reservoir chamber 4 underneath the filter 2, and drops into the coffee cup through the opening 74.

115 The internal separation of the container by the filter 2 into the upper and the lower chambers allows the material 5 to be filtered, such as coffee, to be charged onto the upper area of the filter and the open top to be tightly sealed by the lid 6. Consequently, the charged nitrogen gas fills both the upper and the lower chambers and comes into contact with all of the material 5 so that deterioration in eg flavour of the coffee material can be prevented over a long period. The breaching of the portion 7

120 immediately provides an opening 74 so that the container instantly becomes usable as a filter or percolator. The present container can this provide a simple and quick way of preparing a beverage or the like by either filtering or percolating material such as ground or powder coffee and is suitable for use at

130

home and also commercially. The container can have a very simple construction and serves both as a sealed storage container and as the means with which the beverage can be prepared. The present  
5 container can be used for example for coffee, tea and other beverages or the like.

#### CLAIMS

10 1. A sealed container having a partition in the form of a filter which separates the container into an upper and a lower chamber, wherein the upper chamber contains a material from which a beverage or the like can be prepared by the addition of a liquid  
15 and the lower chamber includes a portion adapted so that, in use, it can be breached to provide an opening for the outflow of liquid from the container.

2. A container according to claim 1 wherein the container comprises a removable sealing lid forming  
20 a top wall of the upper chamber.

3. A container according to claim 1 or claim 2 wherein the outer wall of the container includes a peripheral shoulder which provides an attaching surface on the inside of the container for the  
25 partition.

4. A container according to any one of claims 1 to 3 wherein the said portion is a region of reduced thickness in the base of the container.

5. A container according to any one of claims 1 to 3 wherein the said portion is a removable outwardly directed projection from the base of the container.  
30

6. A container according to any one of claims 1 to 3 wherein the base of the container is in conical or pyramidal form and the said portion is at the apex of  
35 the cone or pyramid and is adapted to be removed.

7. A container according to any one of the preceding claims charged with nitrogen gas.

8. A container substantially as herein described with reference to any one of Figures 1 to 3 of the  
40 accompanying drawings.